

OIR GIS Services LiDAR/Elevation Project Summary

Project Sponsor: U.S. Department of Interior, Office of Surface Mining and State of Tennessee, Department of Environment and Conservation

Project Area: Sequatchie and Van Buren Counties, TN

Acquisition Dates: February 2013

Technical Summary:

Nominal Point Spacing – 1.0 meter

Vertical Accuracy – RMSE_z - 12.5cm (suitable for 2 ft contours)

Horizontal Accuracy is +/- 3.8-foot at the 95% confidence level

Vertical Datum: NAVD88, Geoid09, meters

Horizontal Datum: NAD83, (NSRS 2007)

Coordinate System: State Plane TN FIPS 4100, NAD83 (2011), U.S. Survey Feet

Tiling Scheme: 14,000 x 8,000 feet tiles

Products:

- Unclassified all return point cloud in LAS 1.4 format
- Classified all return point cloud in LAS 1.4 format.
- Digital elevation model (DEM) of ground surface (1 meter grid), hydro flattened with 3-D breaklines in Esri GRID format
- 3-D breaklines suitable to support hydro-flattening as an Esri geodatabase.
- Ground (bare earth) MicroStation 3-D graphic *.dgn file will be required that contains LAS class 8 model key points and breaklines
- Intensity Images in GeoTIFF format
- Building Outlines
- FGDC compliant group level metadata

